

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A circuit arrangement, comprising:  
a low temperature coolant circuit configured to cool charge air in a motor vehicle having a supercharger,  
a single-unit, integrated charge-air and coolant radiator cooled by coolant flowing through a passage of the coolant circuit, and  
a temperature sensor provided at a coolant outlet of the radiator ~~or at a short distance downstream~~, wherein the temperature sensor is configured to measure a coolant outlet temperature.
2. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the coolant flow rate is controlled as a function of the determined coolant temperature.
3. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is a thermostat.
4. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is integrated into a plastic part which serves to carry coolant.
5. (Previously Presented) The circuit arrangement as claimed in claim 4, wherein the plastic part is produced by means of plastic injection-molding.
6. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the low temperature coolant circuit is connected to a main coolant circuit, so that there is an exchange of coolant.
7. (Previously Presented) The circuit arrangement as claimed in claim 6, wherein a control valve is arranged in the low temperature coolant circuit.
8. (Currently Amended) The circuit arrangement as claimed in claim 7, wherein the control valve is arranged upstream of a low temperature coolant radiator or upstream of the charge-air

and coolant radiator.

9. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the coolant traveling from the charge-air/coolant radiator is fed upstream of a pump to a main coolant circuit.

10. (Currently Amended) A method for operating a circuit arrangement, comprising:  
circulating coolant through a low temperature circuit configured to cool charge air in a motor vehicle having a supercharger,  
providing a single-unit, integrated charge-air and coolant radiator cooled by coolant flowing through a passage of the coolant circuit,  
determining the temperature of coolant at an outlet of the radiator ~~or at a short distance downstream from the outlet~~, and  
controlling a coolant flow rate through the radiator.

11. (Previously Presented) The method as claimed in claim 10, wherein the coolant flow rate through the radiator is controlled taking into consideration a rotational speed and/or load, in particular of a drive engine of the motor vehicle, a traveling speed of the motor vehicle, an outside temperature and/or an ambient pressure.

12. (Previously Presented) The circuit arrangement as claimed in claim 1, wherein the temperature sensor is integrated with the coolant outlet of the radiator.

13. (Previously Presented) The circuit arrangement as claimed in claim 1, further comprising a coolant circuit configured to cool coolant for an engine of the motor vehicle.

14. (Previously Presented) The circuit arrangement as claimed in claim 1, further comprising a low temperature coolant radiator configured to cool coolant supplied to the single-unit, integrated charge-air and coolant radiator.

15. (Previously Presented) The method as claimed in claim 10, wherein the step of determining the temperature of the coolant at the outlet of the radiator is performed by using a sensor integrated with the coolant outlet of the radiator.

16. (Previously Presented) The method as claimed in claim 10, further comprising the step of circulating coolant for an engine of the motor vehicle through a second circuit.

17. (Previously Presented) The method as claimed in claim 10, wherein the step of circulating coolant through the low temperature circuit comprises circulating the coolant through a low temperature coolant radiator configured to cool the coolant supplied to the single-unit, integrated charge-air and coolant radiator.